

The Burden of Diarrheal Illness in FoodNet, 1996-2003

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Background: Few current data exist on the burden of diarrheal disease in the U.S. The CDC's Foodborne Disease Active Surveillance Network (FoodNet) provides a unique opportunity to determine the population-based prevalence of diarrheal illness and associated care-seeking behaviors.

Methods: We analyzed data from phone surveys administered in FoodNet states using random digit dialing methodology, during four 12-month cycles from 1996-2003. The questionnaire ascertained demographic, health and food consumption information. Participants were asked about illness and activities in the month before interview. We defined acute diarrheal illness as ≥ 3 loose stools in 24 hours with impairment of daily activities or duration of diarrhea >1 day. Respondents with chronic diarrhea were excluded.

Results: Surveys were completed for 9003, 12755, 14647 and 16435 respondents in cycles 1 through 4 respectively. The prevalence of acute diarrheal illness reported in the month before interview ranged from 4.5% to 5.2% among the four cycles, without evidence of trend. Diarrheal illness was consistently highest (7.3% - 10.3%) among children < 5 years of age and lowest (2.2% - 2.7%) among those ≥ 65 years of age. More females (4.7% - 6.0%) reported acute diarrheal illness than males (4.3% - 4.7%). The proportion of respondents with acute diarrheal illness who sought medical care ranged from 12.2% to 22.9% among the cycles. Of those who sought medical care, stool cultures were submitted by 18.1% to 23.3%. Antibiotics were taken by 4% to 11% of persons with acute diarrheal illness. Changes in question wording between survey cycles may account for some of the differences over time in the reported use of medical care and antibiotics.

Conclusions: The prevalence of acute diarrheal illness is substantial, and was remarkably stable over the 8-year study period. The reasons for the high rates of antibiotic use and the variations in care-seeking require further investigation.